



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,483	12/31/2003	Michael S. Collins	0103-0050	1206
43231	7590	05/01/2006	EXAMINER	
ZIMMER TECHNOLOGY - REEVES			RAMANA, ANURADHA	
P. O. BOX 1268			ART UNIT	PAPER NUMBER
ALEDO, TX 76008			3733	

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

6

<b>Office Action Summary</b>	<b>Application No.</b> 10/749,483	<b>Applicant(s)</b> COLLINS ET AL.	
	<b>Examiner</b> Anu Ramana	<b>Art Unit</b> 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) ☐ All    b) ☐ Some \*    c) ☐ None of:
    - 1. ☐ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because it is not descriptive of the invention. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claims 9-13 are objected to because of the following informalities. In line 1 of each of these claims, "sleeve" should be "combination" to be consistent with the language of claim 8. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Schroeder (US 4,726,359).

Schroeder discloses a sleeve provided in an initially rolled ring shape that is stretchable over a male junction element (Fig. 1, col. 3, lines 37-68 and col. 4, lines 1-38).

With regard to the sleeve body having "an outer portion able to be received in the female junction element and inner portion able to receive the male junction element, the sleeve body being positionable between the male and female junction elements," it has been held that the recitation that an element is adapted to perform a function is not a positive limitation but only requires the ability to so perform and does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Claims 1-3, 5-8, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by White (US 6,428,578).

White discloses a radially flexible or "stretchable" sleeve 16 for use with a modular orthopedic implant having an outer portion able to be received in a female junction element and an inner portion able to receive a male junction element wherein the sleeve has sufficient friction and resilience, i.e., means for maintaining the first and second components ((14, 30) and 10) in an assembled condition (Figs. 3-3B and 6-8, col. 1, lines 5-8, col. 4, lines 26-67, col. 5 and col. 6, lines 1-50).

Claims 1-3, 5-8, 10, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Averill et al. (US 4,921,500).

Averill et al. disclose a modular orthopedic implant having a femoral stem or "first component" 10 with a male junction element 18 and a femoral head component or "second component" 20 with a female junction element 32 and an adaptor or "hollow sleeve" 40 with grooves 66 extending circumferentially around the outer surface 52 of the sleeve that maintain the first and second components in an assembled condition wherein the stem and head components are made of a biocompatible metal (Fig. 3, col. 3, lines 16-68, col. 4 and col. 5, lines 1-51).

Claims 1-3, 5-8, 10, 13-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Pratt et al. (US 5,080,679).

Pratt et al. disclose a modular orthopedic implant including: a femoral stem or "first component" 21 with a male junction element 45; a second component including a femoral head component 25 with a female junction element 37 and an acetabular component 31; and an adaptor or "hollow sleeve" 19 that maintains the first and second components in an assembled condition wherein the stem and head components are made of a biocompatible metal (Fig. 3, col. 3, lines 16-68, col. 4 and col. 5, lines 1-51).

Claims 1-3, 5-11, 14, 16, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fallin (US 5,108,452).

Fallin discloses a modular orthopedic implant including: a femoral stem or "first component" 11 with a male junction element 46; a second component including a femoral head component 27 with a female junction element 28; and an adaptor or "hollow sleeve" 46 that maintains the first and second components in an assembled condition (Figs. 6 and 18, col. 1, lines 12-23, col. 3, lines 21-23, col. 6, lines 13-68, col. 7 and col. 8, lines 1-26).

Regarding claims 9 and 11, Fallin discloses that his prosthesis can be supplied in kit form with a plurality of components 11 and 27 provided in various sizes so that a hip prosthesis can be custom fitted to a particular patient by a surgeon. Components that do not fit would be provisional implant components and components that fit would be actual implant components.

The method steps of claims 17 and 18 are performed when a prosthesis is custom fitted to a particular patient.

Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Stocks et al. (US 6,432,141).

Stocks et al. disclose a joint prosthesis assembly including a membrane 54 with an end portion 58 that can receive a male junction element 44 and an outer portion 56 that can be received in a female junction element 50 (Figs. 4 and 8, col. 5, lines 38-67 and col. 6, lines 1-49). It is noted that since membrane 54 is flexible it is initially in a collapsed or rolled configuration.

The method steps of claims 17-19 are performed when membrane 54 is attached to elements 44 and 50.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3733

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pratt et al. (US 5,080,679) in view of McLean (US 2002/0116068).

Pratt et al. disclose that component 23 can be made of any material having properties similar to titanium. Pratt et al. disclose all the elements of the claimed invention except for the use of a polymer.

McLean teaches the use of synthetic materials such as metals, ceramics or plastics to construct prosthetic components (para [0053]).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the Pratt et al. prosthetic components of metal and polymer, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over White (US 6,428,578) in view of McLean (US 2002/0116068).

White discloses all elements of the claimed invention except for a head component engageable with the tapered neck 44 of proximal body 10 and an acetabular component engageable with the head component.

The use of an acetabular prosthesis including a cup and liner fixed to a reamed acetabular surface articulating with a spherical head attached to the tapered stem of a neck component or "proximal body" for total hip arthroplasty is well known (see paras [0003] – [0007]).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a spherical head attached to stem 44 of the White prosthesis and an acetabular cup in a reamed acetabulum for articulation with the spherical head, as taught by McLean, for total hip arthroplasty in a patient.

***Allowable Subject Matter***

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (571) 272-4718. The examiner can normally be reached Monday through Friday between 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached at (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR   
April 28, 2006